

INFORMATION REGARDING THE NORTH FORK RESERVOIR

During this challenging time in the aftermath of Tropical Depression Frances, residents and business owners have had questions about the North Fork Reservoir and the use of floodgates during periods of heavy rain.

Please review the information below to understand the circumstances surrounding Frances and preparations being made for Ivan.

- The Asheville area received measurable rain seven out of ten days leading up to Tropical Depression Frances, elevating ground saturation levels.
- The North Fork Water Treatment Facility operates under a flood management plan researched and developed by an independent engineering firm and approved by the state of North Carolina. The plan is designed to protect the integrity of the earthen dam, which contains the primary drinking water supply for Asheville and the surrounding region, from being breached by floodwaters. According to the flood management plan and to protect the earthen dam, floodgates must be opened if the facility's area receives 6 or more inches of rain in a 24-hour period or if lake levels threaten the dam's safety. This process is carefully monitored.
- Beginning Friday, Sept. 3 city staff began preparing for potential effects of Tropical Depression Frances on Asheville. On Saturday, Sept. 4, city emergency personnel hand delivered 300 notices to properties located in the 100-year flood plain notifying business owners and residents that flooding was highly probable and to take appropriate action. In addition, on the same day, the city sent more than 4,000 telephone notifications regarding potential flooding.
- In preparation for Tropical Depression Frances, the floodgates were opened one foot each at about 1 p.m. on Tuesday, Sept. 7. In a previous study supported by the Army Corps of Engineers, research indicated that opening the floodgates two feet each has a negligible effect on the level of the Swannanoa River.
- Tropical Depression Frances brought an excessive amount of rainfall to Western North Carolina, particularly to the Black Mountain area. More than 17 inches of rain was reported at the North Fork Water Treatment Facility on Tuesday, more than has ever been recorded at that location over a 24 hour period, more than double precipitation predictions and more than three times the amount recorded at the Asheville Airport. The deluge caused significant erosion, washing away the earth below and causing the breaks in the 24" and 36" water lines.
- As the area reached the pre-defined threshold of receiving 6 inches of rain, the gates remained open; however, the amount of water coming over the spillway continued to increase. At that point, flooding in the Swannanoa River basin due to rainfall was inevitable and was not affected by the amount of water flowing out of the reservoir. Lake levels were closely monitored to prevent damage to the dam that would have occurred had the lake overflowed the dam with potentially catastrophic results.
- As a result of this unprecedented amount of rain, the Swannanoa River reached its highest level in recorded history, surpassing the flood of 1916.
- Flood gates have remained open since Tropical Depression Frances, closing for one day to complete repairs to a water transmission line. Keeping floodgates open has allowed the lake level to decrease in anticipation of heavy rainfall from Ivan.
- Water lines have been repaired and reinforced, and the water system is in stable condition.

Please understand the extreme importance of closely monitoring rain levels at the North Fork facility in order to protect the integrity of the earthen dam. Should the dam fail, the Asheville area would suffer catastrophic loss of life and property. We truly appreciate your attention to this matter.